

Ying-Chu Lin Wu, who received a doctorate in aeronautics, and her two sons, Albert and Ernest.

### Commencement 1963

At Caltech's 69th annual commencement on June 7, a total of 350 students received degrees— 133 Bachelors of Science, 114 Masters of Science, 90 Doctors of Philosophy and 13 Engineers. Of the 52 men who graduated with honors, 2 received both academic honor and Student Body Honor Keys: Henry Abarbanel and Lawrence Gershwin. Student Body Honor Keys were also received by Thomas Bopp, David Ollis, Larry Rabinowitz, Arthur Robinson, Joseph Russo, James Sagawa and Robert Schmulian.

Presented for the first time this year was the E. T. Bell Mathematics Prize, which is awarded to one or more juniors or seniors for outstanding original research in mathematics. It was won by seniors Edward A. Bender and John H. Lindsey II.

This year's commencement address was delivered by John William Gardner, president of the Carnegie Corporation of New York.

#### Dr. Henry Eversole

Dr. Henry Eversole, physician and former research associate in plant physiology at Caltech, died on June 1 at his home in Santa Barbara, California. He was 86. He was a pioneer researcher in chest diseases and in the environmental control of plant growth.

A native of Middleport, Ohio, Dr. Eversole came to Los Angeles after serving in the Spanish-

# The Month at Caltech

American War. He was graduated from the medical division of USC in 1906. After two years of postgraduate studies at Johns Hopkins University in Baltimore, and in Berlin and Vienna, he returned to Los Angeles to specialize in new techniques for treating chest diseases.

During World War I, Dr. Eversole served as a major in the American Red Cross. Attached to Allied forces that were supporting White Russians against the Bolshevik advance in Siberia, he was active in efforts to evacuate cities, fight typhus, and free prisoners from concentration camps. Upon withdrawal of the Allied troops from Siberia, he conducted hundreds of lost Russian children through the Panama Canal to Finland for repatriation.

From 1923 to 1927 Dr. Eversole was a member of the Rockefeller Foundation international staff, serving as European director of its division of medical education.

In 1929 Dr. Eversole returned to California and began intensive research on the environmental factors in plant culture. In the mid-30's he offered to help Caltech in the planning and construction of a research greenhouse in which all the climatic factors influencing plant growth could be artificially created and regulated. The results were the Clark Greenhouses and the Earhart Plant Research Laboratory. These installations received worldwide recognition for their contributions to the understanding of plant physiology, and the principles and techniques of their operation led to the establishment of dozens of other laboratories throughout the world.

#### Horace W. Babcock

Horace W. Babcock, assistant director of the Mount Wilson and Palomar Observatories, has been named associate director by the Carnegie Institution of Washington and Caltech, which operate the observatories. He will become director upon the retirement of Ira S. Bowen, present director of the observatories, in June 1964. Dr. Bowen, who received his PhD from Caltech in 1926, has been director of both observatories since Palomar Observatory was established in 1948, and was director of the Mount Wilson Observatory for two years prior to that. He was formerly professor of physics at Caltech and has been on the faculty since 1921.

Dr. Babcock has been a member of the observatory staff since 1946. His father, Harold D. Babcock, was physicist at Mount Wilson Observatory from 1909 to 1948. Although the elder Babcock has retired, he and his son have constructed and put into operation the magnetograph at the Hale Solar Observatory in Pasadena.

Horace Babcock graduated from Caltech in 1934 and received his PhD from the University of California in 1938. His astronomical work has been concerned with variable stars, the rotation of spiral galaxies, the light of the night sky, and, in particular, Dr. Babcock has pioneered in research on the magnetism of the sun and stars.

He has also been keenly interested in astronomical instrumentation, and has made improvements in the ruling machine and supervised the ruling of optical diffraction gratings at the observatories, where some of the world's finest gratings have been made. Gratings are used to produce and study spectra of visible light. He has devised a precise automatic guider for the 200-inch Hale Telescope, and has developed integrating exposure meters for spectroscopy.

Dr. Babcock is a member of the American Academy of Arts and Sciences, the National Academy of Sciences, the American Astronomical Society, the Astronomical Society of the Pacific, the International Astronomical Union, the Society of Sigma Xi, and Tau Beta Pi. In 1957 he received the Draper Medal of the National Academy of Sciences, and in 1958 was awarded the Eddington Medal of the Royal Astronomical Society.

## Honors and Awards

President Lee A. DuBridge gave the commencement address and received an honorary Doctor of Laws degree at Loyola University's 51st annual commencement on June 9 in Los Angeles.

Frederick C. Lindvall, professor of electrical and mechanical engineering, and chairman of the division of engineering and applied science, will be honored by the Senate of the National University of Ireland on July 11 at the University College in Dublin. He will receive a degree of



Horace W. Babcock and Ira S. Bowen

D.Sc., *Honoris Causa*, in recognition of his distinction in the fields of electrical and mechanical engineering.

Robert B. Leighton, professor of physics, and Roger W. Sperry, Hixon professor of psychobiology, have been elected fellows of the American Academy of Arts and Sciences. Dr. Leighton received the distinction for his highly intricate camera that photographs phenomena on the sun's surface. Dr. Sperry developed the "twin-brain" technique for studying the brain's circuitry and recently confirmed with microphotographs his theory that the nerve fiber circuits in the developing brain grow, assemble, and organize themselves by intricate chemical codes under genetic control.

Robert L. Daugherty, professor of mechanical and hydraulic engineering, emeritus, has been reappointed by the Los Angeles County Board of Supervisors to a fourth 3-year term as a member of the Air Pollution Control Hearing Board.

# Caltech Glee Club Record

Men of Science in Song, a new recording by the Caltech Glee Club of 55 men directed by Olaf M. Frodsham, is now available. The record contains a variety of songs by the Glee Club, the Caltech Madrigal Society, and the Caltech Quartet. The Glee Club is well known on the west coast in concerts, on radio, and in television, and was heard nationally in 1960 on TV when it appeared with the U.S. Marine Corps Band in closing ceremonies of the Winter Olympics. The monaural records are available in the Caltech Bookstore for \$3.00 or may be ordered by mail from the Caltech Glee Club, Dabney Hall.